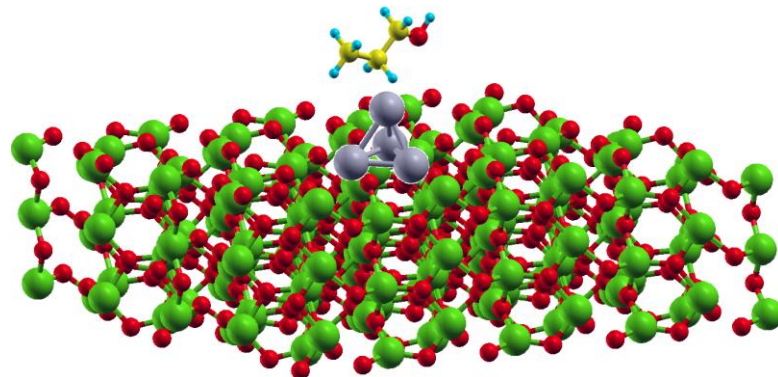




Summary statement: The *Institute for Atom-efficient Chemical Transformations (IACT)* a collaboration between Argonne National Laboratory, Northwestern University, University of Wisconsin and Purdue University is focused on advancing the *science* of catalysis for the efficient conversion of energy resources into usable forms.



RESEARCH PLAN AND DIRECTIONS

Using a multidisciplinary approach involving integrated catalyst synthesis, advanced characterization, catalytic experimentation, and computation, IACT will address the key chemistries for the efficient removal of oxygen and hydrogen addition associated with the utilization of two primary energy resources in the United States, namely coal and biomass.